

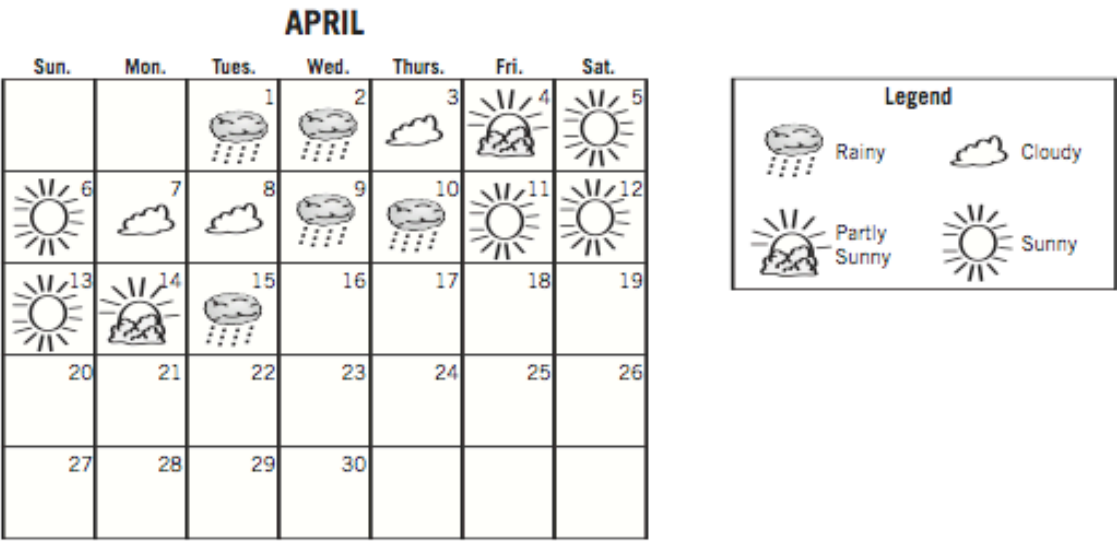
# GRADE THREE EQAO QUESTIONS: Data Management & Probability

## Overall Expectation #1:

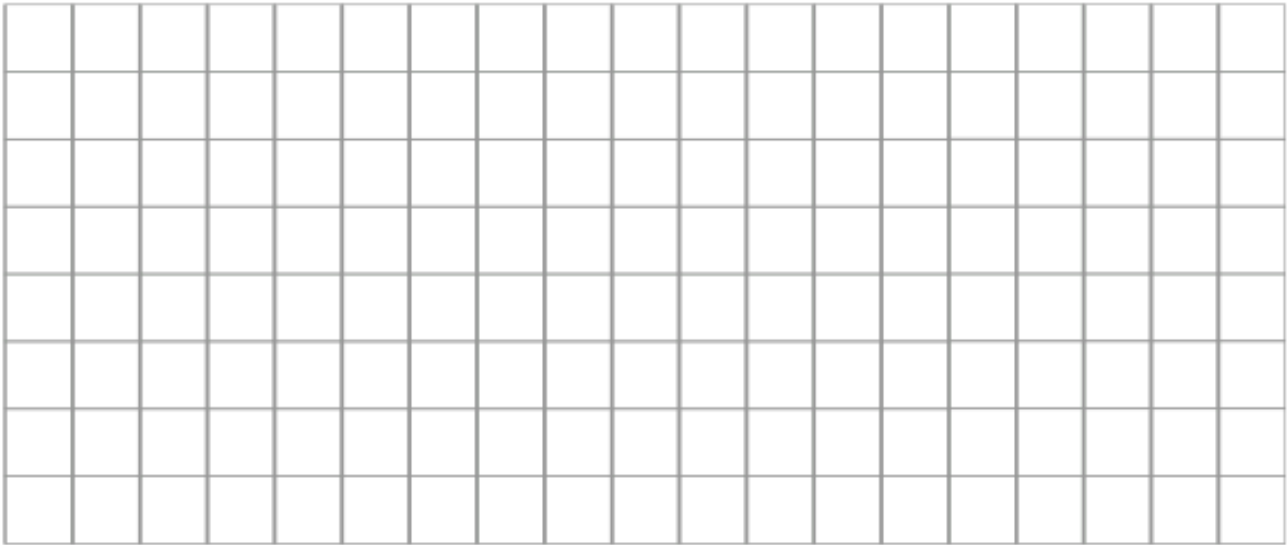
- Collect and organize categorical or discrete primary data and display the data using charts and graphs, including vertical and horizontal bar graphs, with labels ordered appropriately along horizontal axes, as needed

Spring 2006

**29** The students in Mr. Landon's class record the weather each day for the first 15 days on the following calendar.



On the grid paper below, draw a bar graph of the number of days of each type of weather, using the information from the calendar. Include a title and labels for your bar graph.



- 34** Kali tallies the number of each colour of ball used during play day.

**Kali's Ball Tally**

Colour	Number
Green	
Orange	
Purple	
Red	
Yellow	

Kali will make a pictograph using the data from the chart.

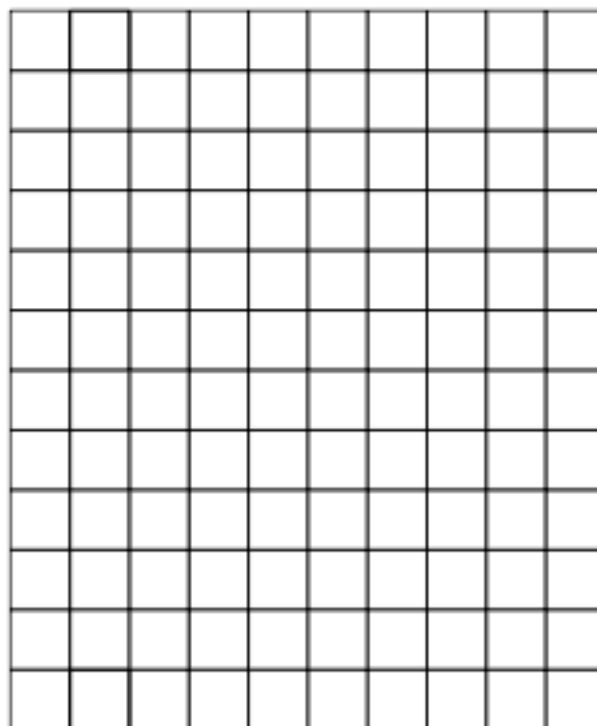
If each ● on the pictograph represents 2 balls, how many ●s should Kali draw to represent the total number of yellow balls tallied?

- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 8

- 27 Mrs. Smith surveys her students about their favourite sports. She displays the results in the following tally chart.

Favourite Sport	
Sport	Number
Soccer	
Running	
Baseball	
Hockey	

Create a bar graph to display the data on the grid below. Remember to include all titles and labels.



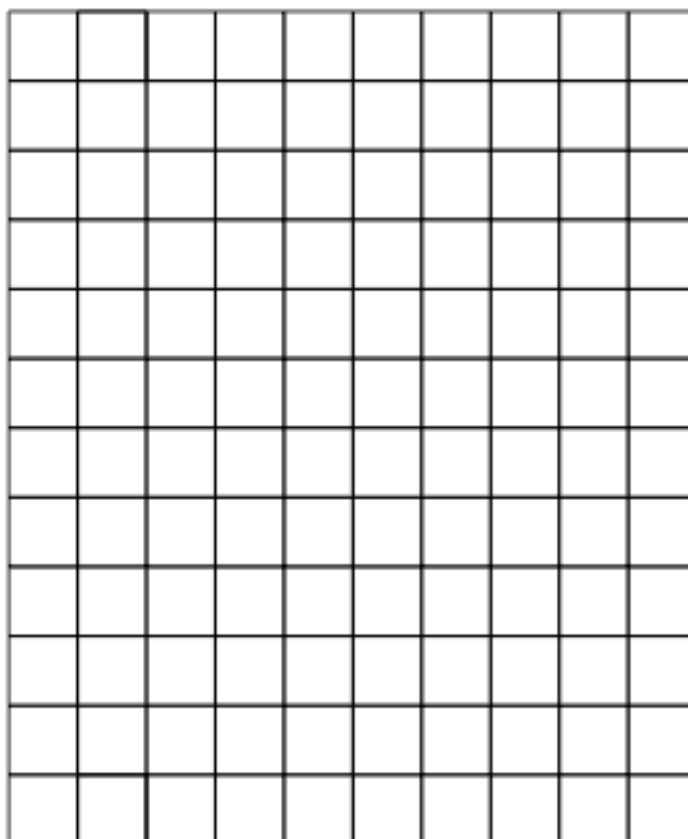
**27** Jocelyn surveys all the Grade 3 students about their favourite colour.

Her results are shown in the table below.

**Favourite Colour**

Colour	Number of students
Red	24
Blue	16
Green	8
Yellow	11

Create a bar graph showing this data. Remember to include all titles and labels.  
Your graph must fit on the grid below.



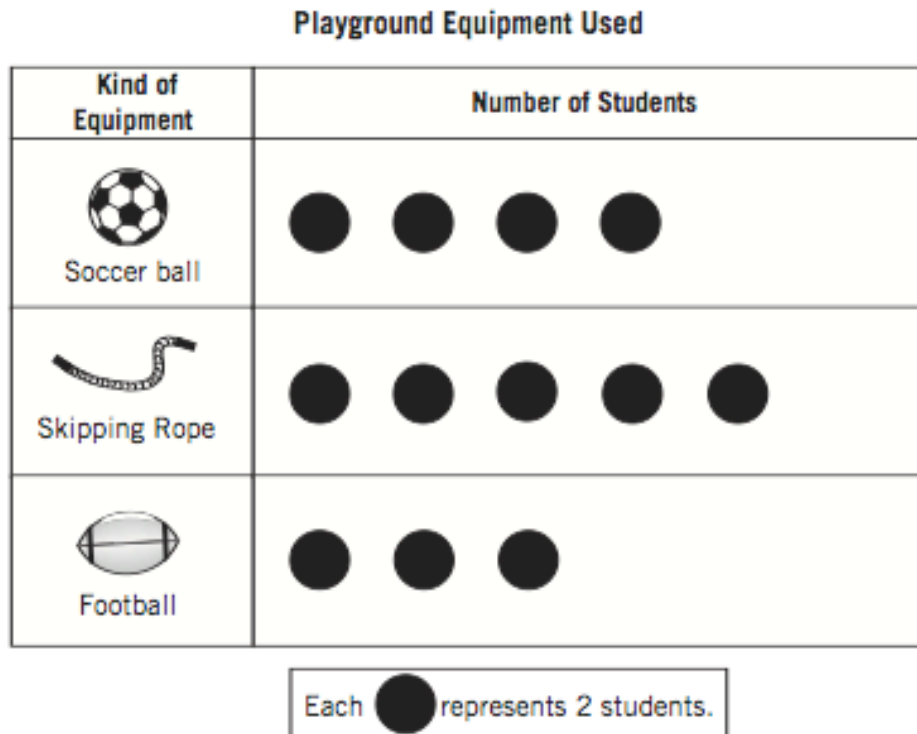
# GRADE THREE EQAO QUESTIONS: Data Management & Probability

## Overall Expectation #2:

- Read, describe, and interpret primary data presented in charts and graphs, including vertical and horizontal bar graphs

Spring 2006

- 9 The pictograph shows the number of students who use each kind of playground equipment at recess.

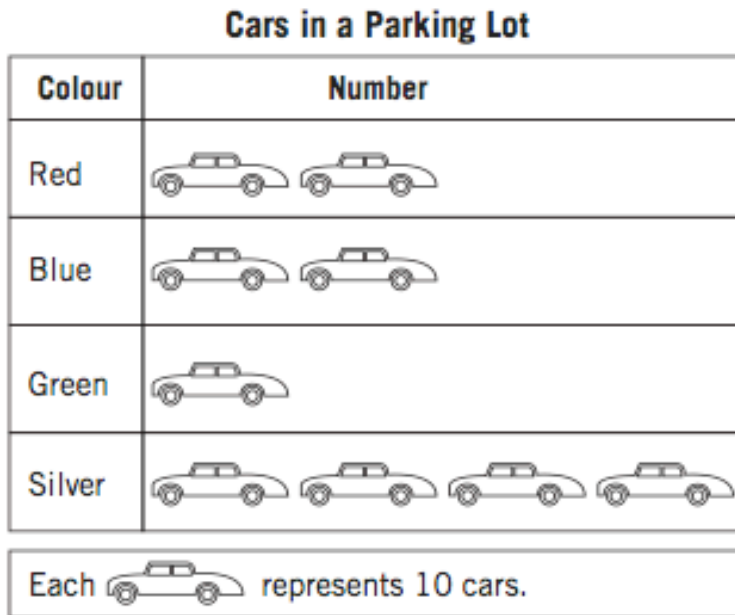


According to the data in the graph, how many more students use skipping ropes than footballs at recess?

Explain how you got your answer.

\_\_\_\_\_ more students use skipping ropes than footballs at recess.

- 31** The pictograph shows the number of each colour of car in a parking lot.



According to the graph, how many fewer green cars than silver cars are in the parking lot?

- ☐ 2
- ☐ 3
- ☐ 20
- ☐ 30 \*

**26** Mr. Bolden asks eight students the number of servings of fruit they eat each day. The results are recorded on the following chart.

**Servings of Fruit per Day**

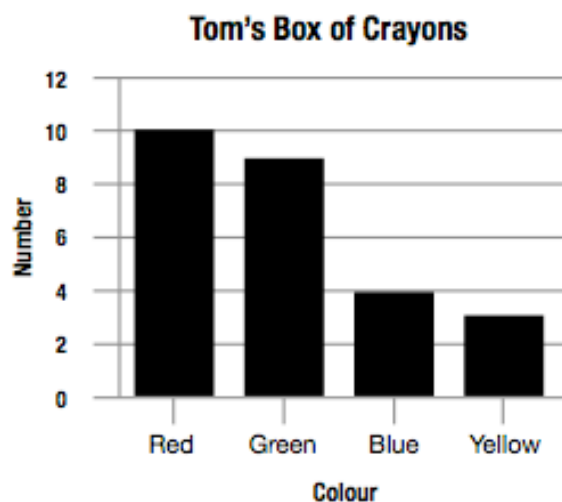
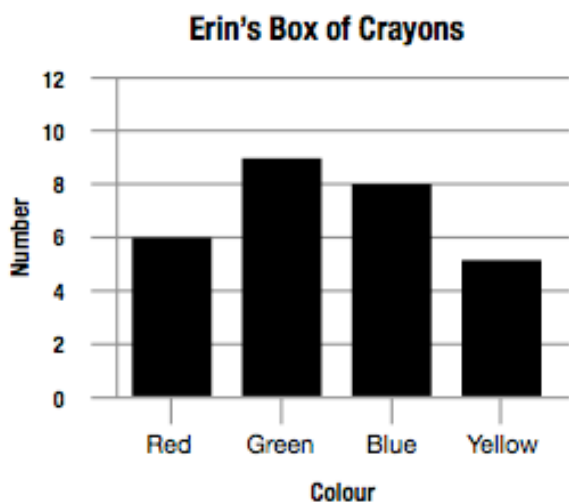
<b>Student</b>	<b>Number of Servings</b>
Doug	4
Ivana	2
Kayla	1
Stan	2
Marco	3
Kris	2
Erin	1
Gina	2

What is the mode of the set of data shown in the chart?

- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5

## GRADE THREE EQAO QUESTIONS: Data Management & Probability

- 27** Erin and Tom each have a box of crayons. The graphs below show the number of each colour of crayon in the two boxes.



Compare the data represented in each of these graphs.

Write about the number and the colour of the crayons in the two boxes.

Explain your thinking.

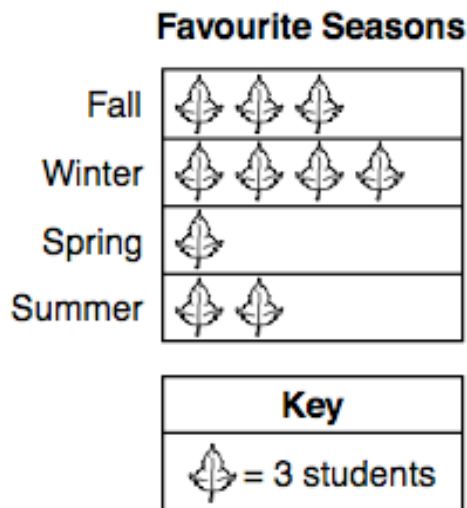
- 14** Rolando makes a chart to show how many pencils his friends have.

Name	Number of Pencils
Therese	6
Marcia	4
Tenelle	3
Raj	4
Chan	3
David	4
Fred	2

What number shows the mode of Rolando's data?

- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 6

- 15 Zack makes a graph to show his friends' favourite seasons.



Which statement about Zack's graph is true?

- ☐ More students like summer than like winter.
- ☐ One more student likes fall than likes summer.
- ☐ Nine more students like winter than like spring.
- ☐ One student likes spring, and four students like winter.

- 15** Niveta makes a table to show how many books her friends have in their desks.

**Books**

<b>Name</b>	<b>Number of books</b>
Jana	6
Kwabena	5
Preet	7
Luke	5
Leah	6
Gurbir	4
Angelo	5

What is the mode of Niveta's data?

- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7

## GRADE THREE EQAO QUESTIONS: Data Management & Probability

- 30 In a class, 26 students choose their favourite type of animal. Their answers are shown in the pictograph below.

**Favourite Type of Animal**

Cat	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Bird	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Dog	
Other	<input type="checkbox"/> <input type="checkbox"/>

**Key**

Each ☐ represents 2 students.











The pictograph is missing the information for dogs.

Complete the pictograph to show how many students choose dogs.


Justify your answer.

- 14** The pictograph below shows the eye colour of the students in a group.

**Student Eye Colour**

Colour	Number of students
Blue	 
Brown	  
Hazel	
Green	   

**Key**

Each  represents 4 students.

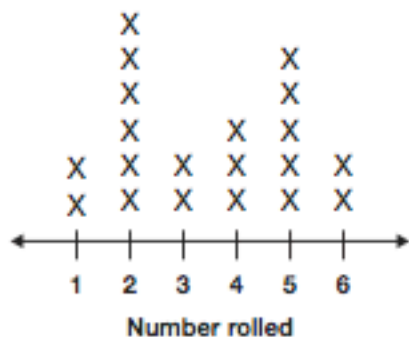
What is the total number of students in this group?

- ☐ 9
- ☐ 10
- ☐ 36
- ☐ 40

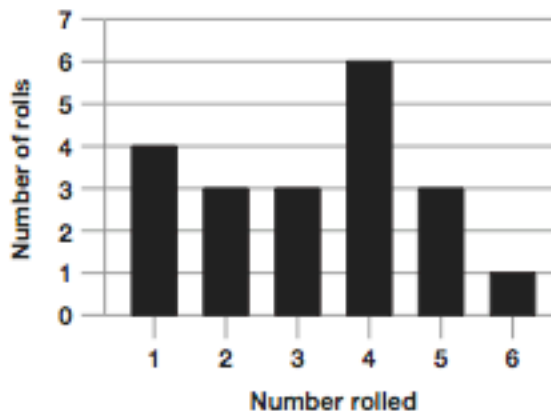
## GRADE THREE EQAO QUESTIONS: Data Management & Probability

- 28 Lily and Seth each roll a number cube 20 times. The cube is numbered 1 through 6. The results of the rolls are shown below.

Lily's Graph



Seth's Graph



Lily says the mode of her data is 2, and Seth says the mode of his data is 3.



















Who is correct?


Circle one:    Lily    Seth

Justify your answer. Write about Lily, and write about Seth.

- 29** The pictograph below shows the number of pails of strawberries some children pick.

**Pails of Strawberries**

Name	Number of pails of strawberries
Quyen	    
Lee	     
Jordan	  
Doug	   

Key
Each  represents 3 pails of strawberries.

Who picks exactly 15 pails of strawberries?

- ☐ Quyen
- ☐ Lee
- ☐ Jordan
- ☐ Doug

## GRADE THREE EQAO QUESTIONS: Data Management & Probability

### Overall Expectation #3:

- Predict and investigate the frequency of a specific outcome in a simple probability experiment

Spring 2006

**5** Each face on Jaime's number cube has a different number:

1, 2, 3, 4, 5, 6

He rolls the number cube 1 time.

What are the chances the number cube lands with a 2 or a 5 facing up?

- ☐ 1 out of 5
- ☐ 2 out of 4
- ☐ 2 out of 6 \*
- ☐ 4 out of 6

**32** Michael has 8 white shirts and 2 blue shirts in a bag. He takes 1 shirt from the bag without looking. Which best describes the chance that the shirt Michael takes from the bag is blue?

- ☐ Impossible
- ☐ Unlikely \*
- ☐ Likely
- ☐ Certain

# GRADE THREE EQAO QUESTIONS: Data Management & Probability

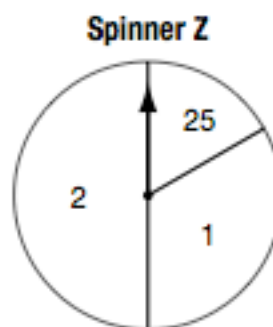
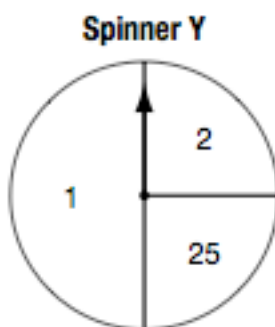
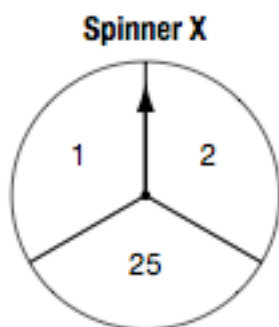
Spring 2007

- 7** Bailey uses a spinner labelled 1, 2 and 25 in a game. Each time she spins the arrow, she earns 1, 2 or 25 points. The table below shows the points she has earned for her last 12 spins.

**Bailey's Points**

Spin	1	2	3	4	5	6	7	8	9	10	11	12
Points Earned	2	25	1	1	2	25	25	1	1	2	1	1

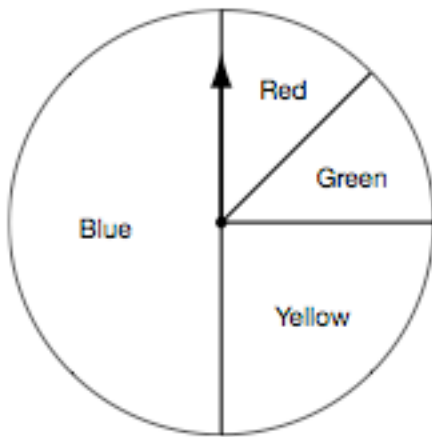
Which of the spinners pictured below could be the spinner Bailey has used to earn the number of points shown in the table?



Justify your answer.

Bailey most likely uses Spinner \_\_\_\_\_.

- 11** Justine will spin the arrow on the spinner shown below 20 times.



How many times should the arrow be expected to land on the section of the spinner labelled blue?

- ☐ 4
- ☐ 5
- ☐ 10
- ☐ 20

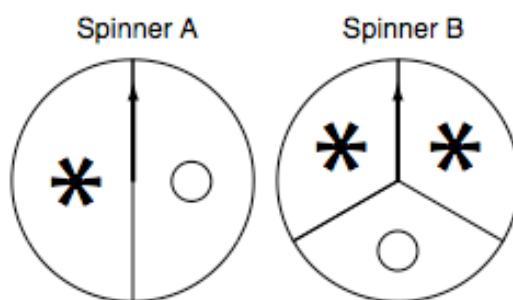
# GRADE THREE EQAO QUESTIONS: Data Management & Probability

Spring 2008

10 Mohit spun a spinner. The chart shows his results.

*	○
50	25

Which of the following spinners did Mohit **most likely** use?



Justify your answer.

Mohit **most likely** used Spinner \_\_\_\_\_.

**26** Which of the following spinners is **most likely** to land on a basketball in one spin?

Legend	
	Soccer
	Basketball

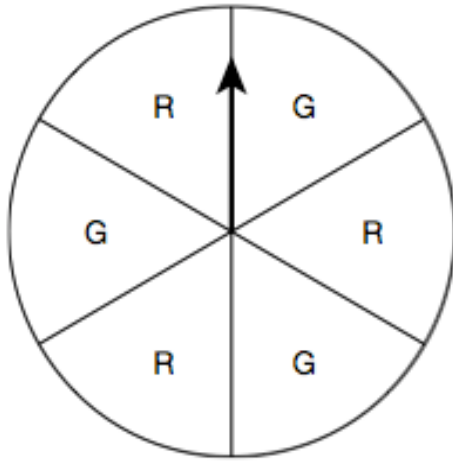
☐

☐

☐

☐


- 14** Kareem is playing a game using the spinner below.



If the arrow lands on an R, Kareem wins.

How many times should Kareem expect to win if he spins the arrow 10 times?

- ☐ 3
- ☐ 5
- ☐ 6
- ☐ 10

- 26** Alexandra has 12 tiles in a bag. The tiles are red, blue or green. How many tiles of each colour should be in the bag to make all colours equally likely to be drawn?

- ☐ 1
- ☐ 3
- ☐ 4
- ☐ 12

**13** Marie is using a spinner to play a game. She spins it 12 times and lands on “Win” 3 times.

Which spinner does Marie most likely use to play her game?

